

FIG. 1

2009-05-01

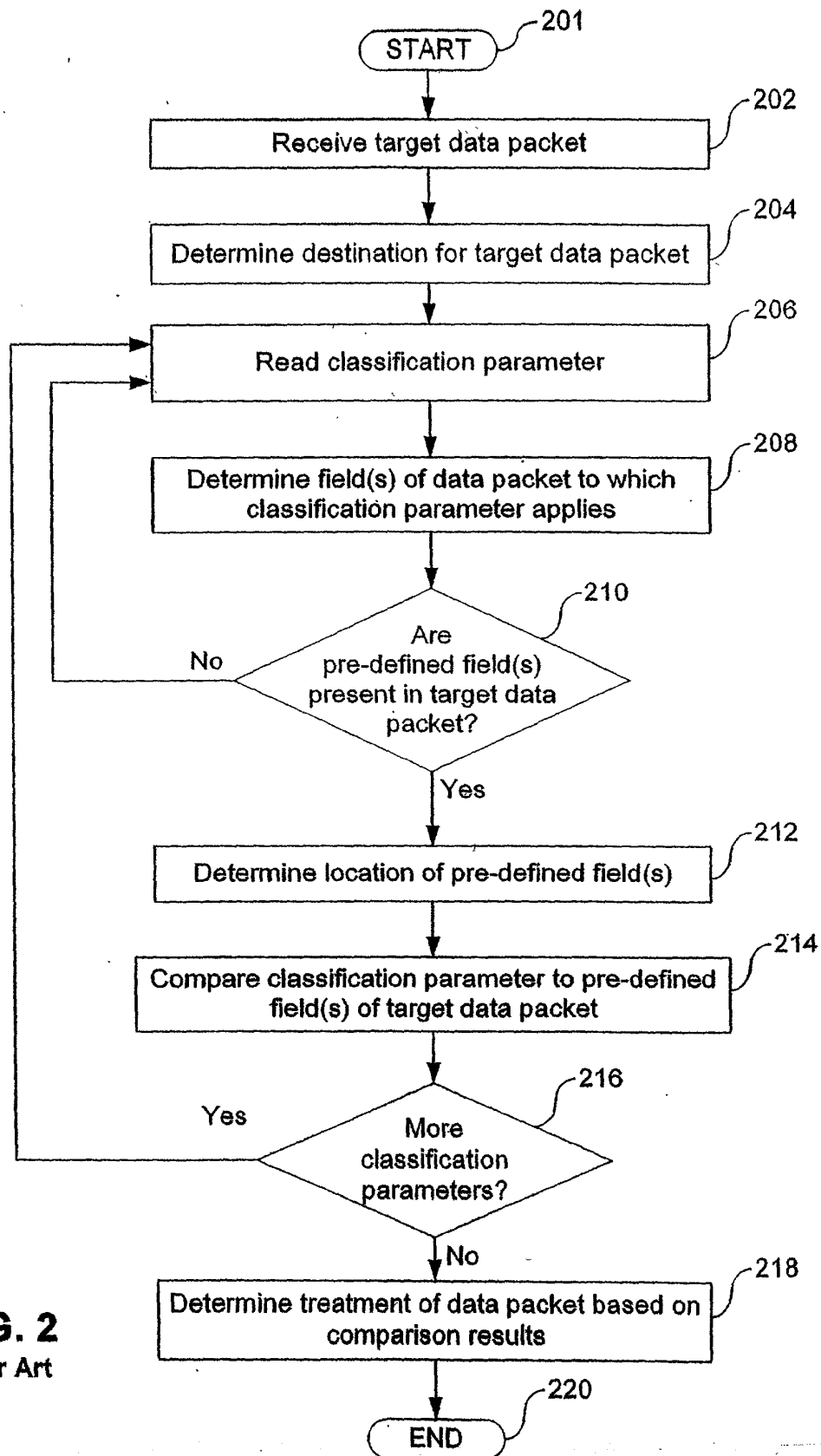


FIG. 2
Prior Art

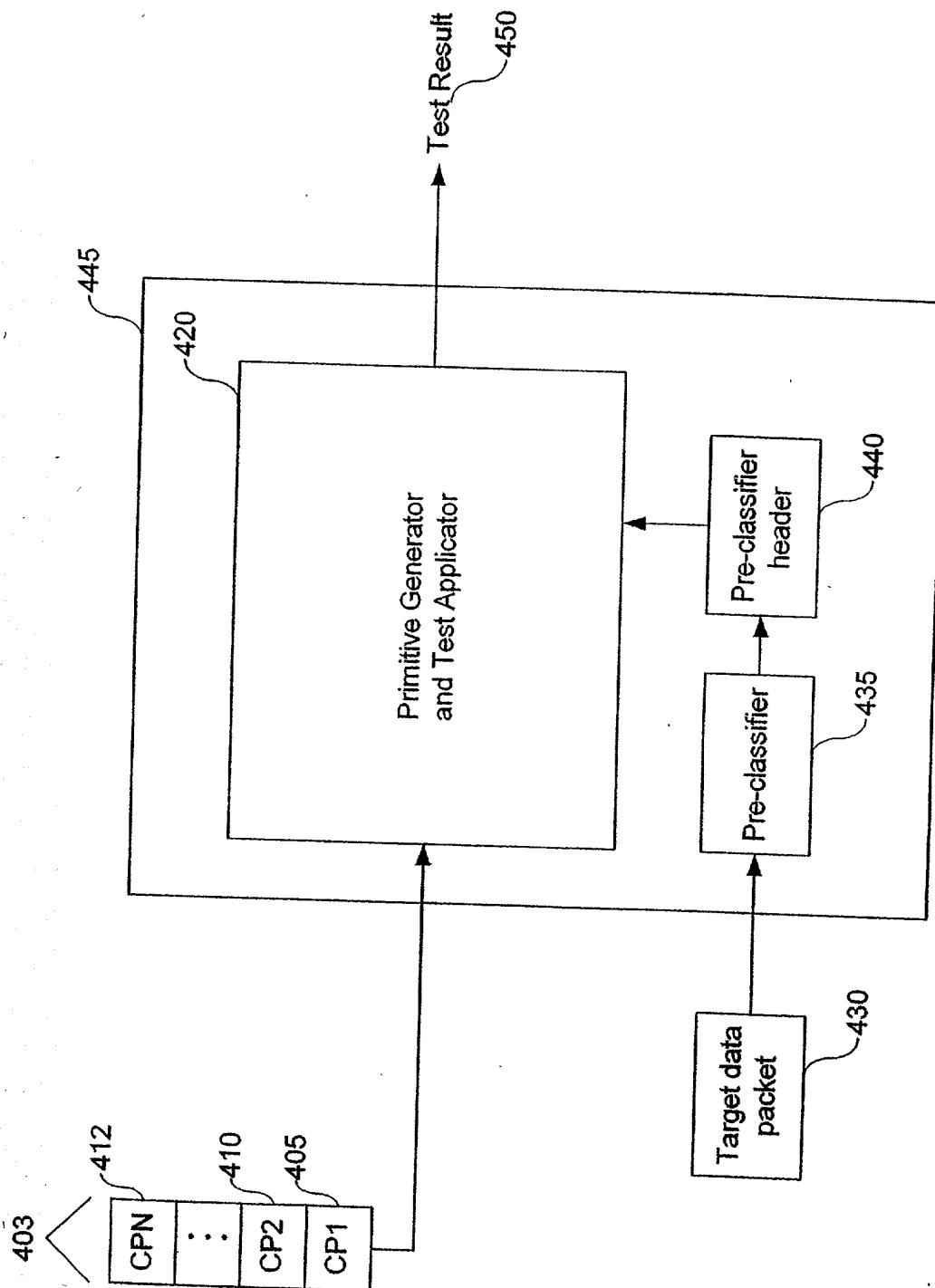


FIG. 4

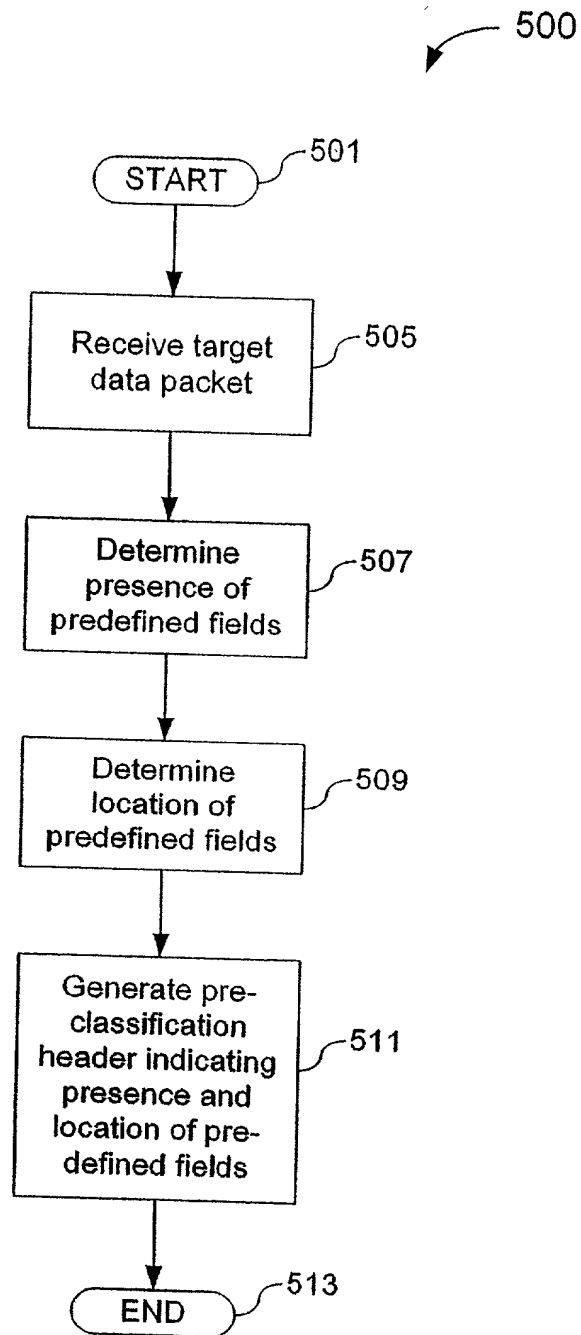


FIG. 5
Pre-classification Flowchart

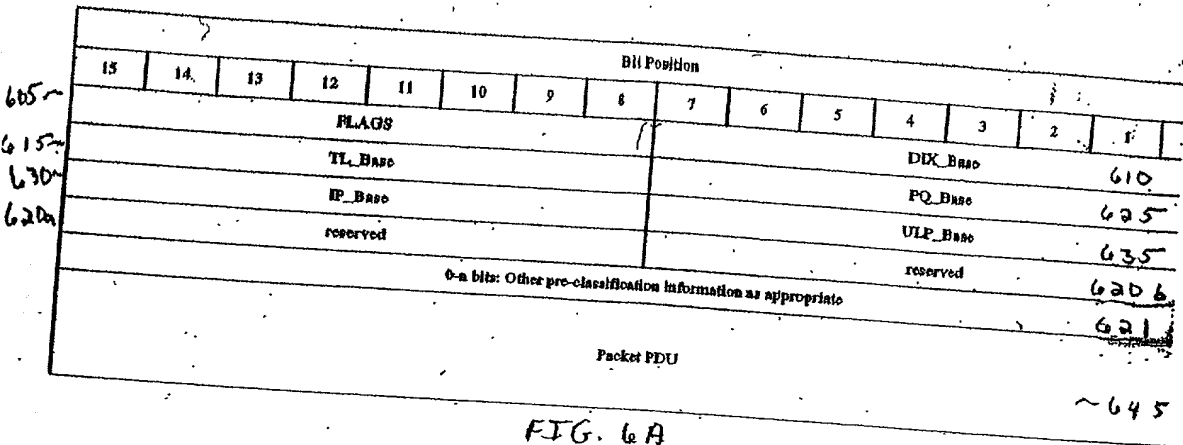


FIG. 6A

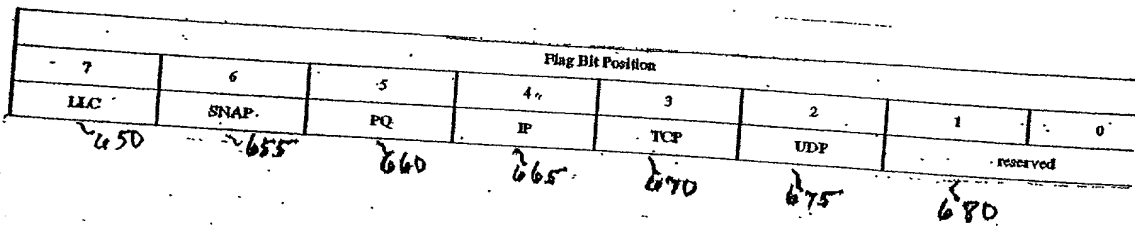


FIG. 6B

700 A
E

| | | Byte | Byte | Byte | Byte |
|---------------|--------------|-------|------|------|------|
| 802.3 Header | DA/SA | 00 | 10 | 18 | 01 |
| | | 02 | 03 | 00 | 10 |
| | | 18 | 04 | 05 | 06 |
| 802.1Q Header | Type/Len | 81 | 00 | | |
| | TCI/TL | 00 | 00 | | |
| IP Header | V/IHL/TOS/TL | 00 | 00 | 08 | 00 |
| | ID/FL/FO | 45 | 00 | 00 | 6e |
| | TTL/PROT/HCS | 00 | 00 | 00 | 00 |
| | Src IP Addr | 00 | 25 | xx | xx |
| | Dest IP Addr | 01 | 02 | 03 | 04 |
| IP Payload | (90 bytes) | 05 | 06 | 07 | 08 |
| | | 00... | | | |

FIG. 7A

700B
↓

| | | | | | |
|--------------------------|---------------|-------|------|------|------|
| 802.3 Header | DA/SA | Byte | Byte | Byte | Byte |
| | | 00 | 10 | 18 | 01 |
| | | 02 | 03 | 00 | 10 |
| 802.2 LLC/SNAP Hdr | Type/Len | 18 | 04 | 05 | 06 |
| | DSAP/SSAP/Ctl | 00 | 72 | | |
| | OUI | aa | aa | 03 | |
| | TYPE | 00 | 10 | 18 | |
| Payload | (106 bytes) | 08 | 06 | | |
| | | 00... | | | |

FIG. 7B

700C
↓

| | | | | | |
|-------------------------|---------------|-------|------|------|------|
| 802.3 Header | DA/SA | Byte | Byte | Byte | Byte |
| | | 00 | 10 | 18 | 01 |
| | | 02 | 03 | 00 | 10 |
| 802.2 LLC Hdr | Type/Len | 18 | 04 | 05 | 06 |
| | DSAP/SSAP/Ctl | 00 | 72 | | |
| | OUI | 00 | 00 | 0x?3 | |
| | TYPE | 00 | | | |
| LLC Payload (111 bytes) | | 00... | | | |

FIG. 7C

700D
↓

| | | | | | |
|--------------------------|---------------|-------|------|------|------|
| 802.3 Header | DA/SA | Byte | Byte | Byte | Byte |
| | | 00 | 10 | 18 | 01 |
| | | 02 | 03 | 00 | 10 |
| 802.2 LLC/SNAP Hdr | Type/Len | 18 | 04 | 05 | 06 |
| | DSAP/SSAP/Ctl | 00 | 72 | | |
| | OUI | aa | aa | 03 | |
| | TYPE | 00 | 10 | 18 | |
| IP Header | V/IHL/TOS/TL | 08 | 00 | | |
| | ID/FL/FO | 45 | 00 | 00 | 6a |
| | TTL/PROT/HCS | 00 | 00 | 00 | 00 |
| | Src IP Addr | 00 | 25 | xx | xx |
| | Dest IP Addr | 01 | 02 | 03 | 04 |
| | | 05 | 06 | 07 | 08 |
| IP Payload (86 bytes) | | 00... | | | |

FIG. 7D

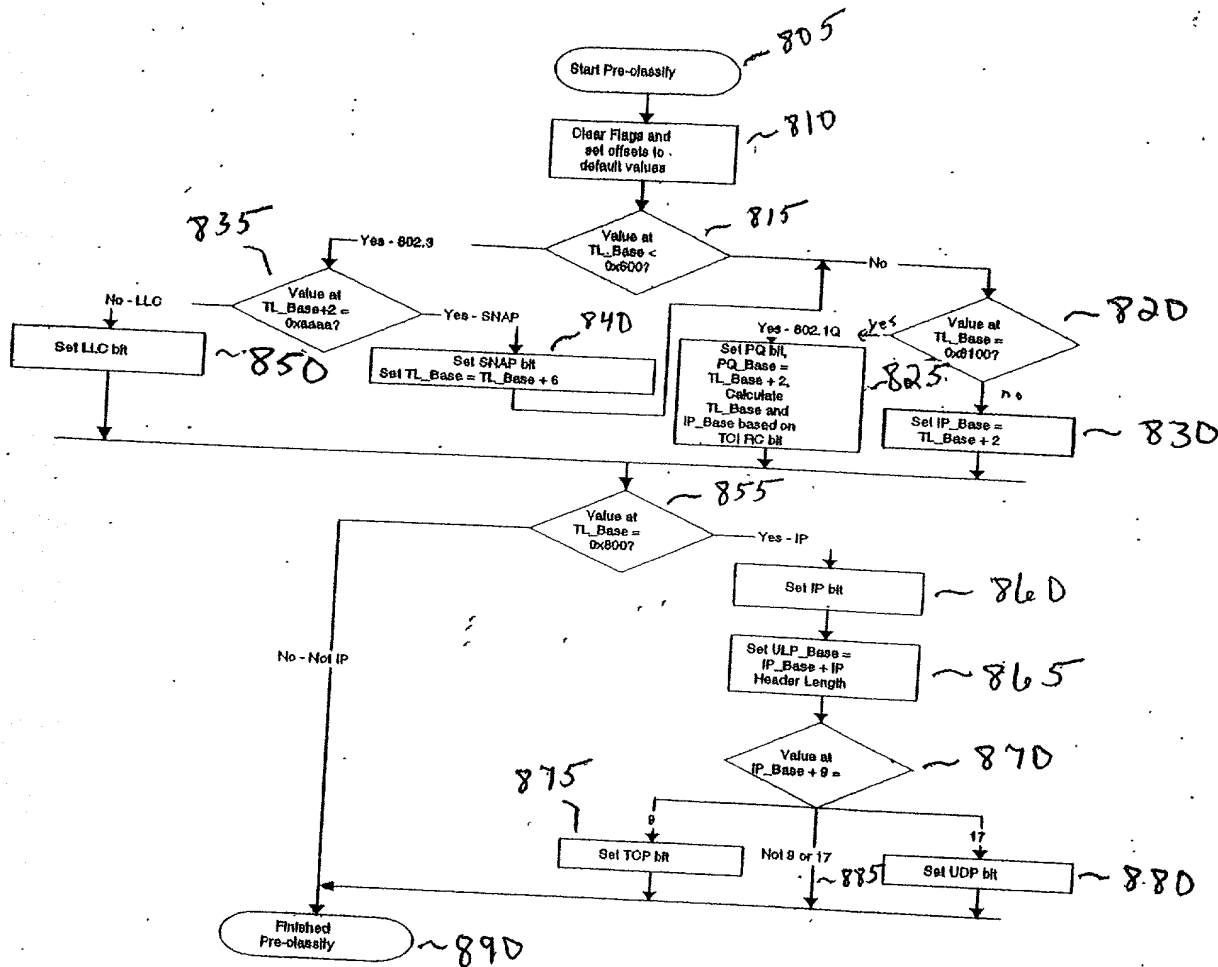


FIG. 8

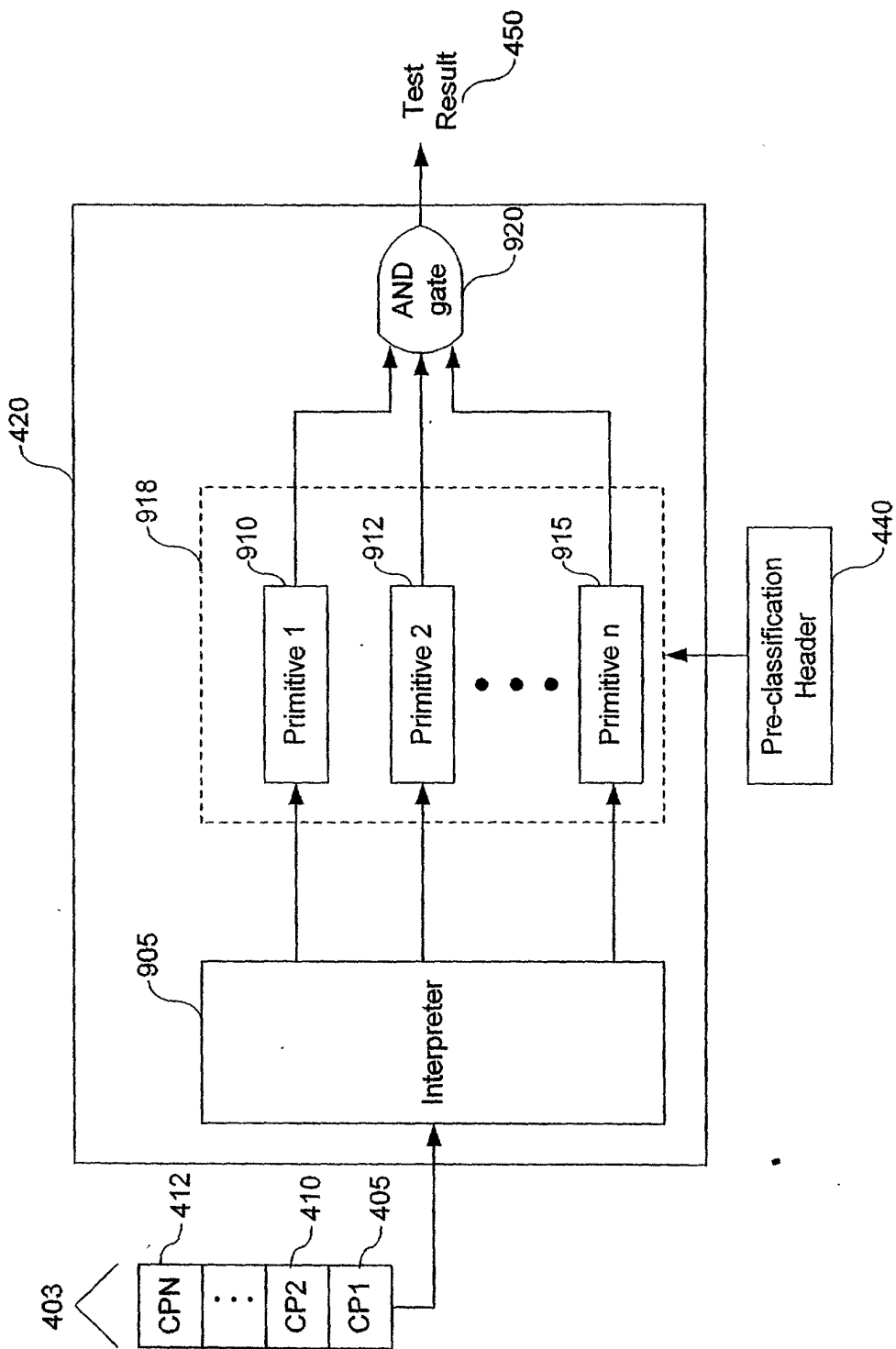


FIG. 9

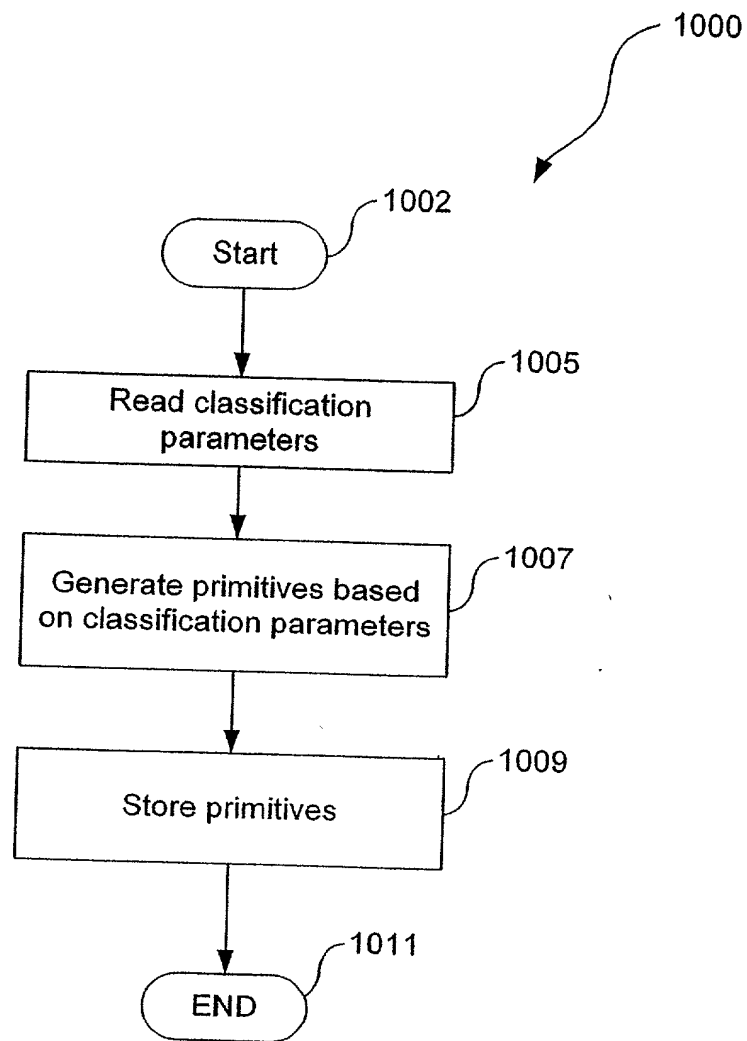


FIG. 10
Primitive Generation

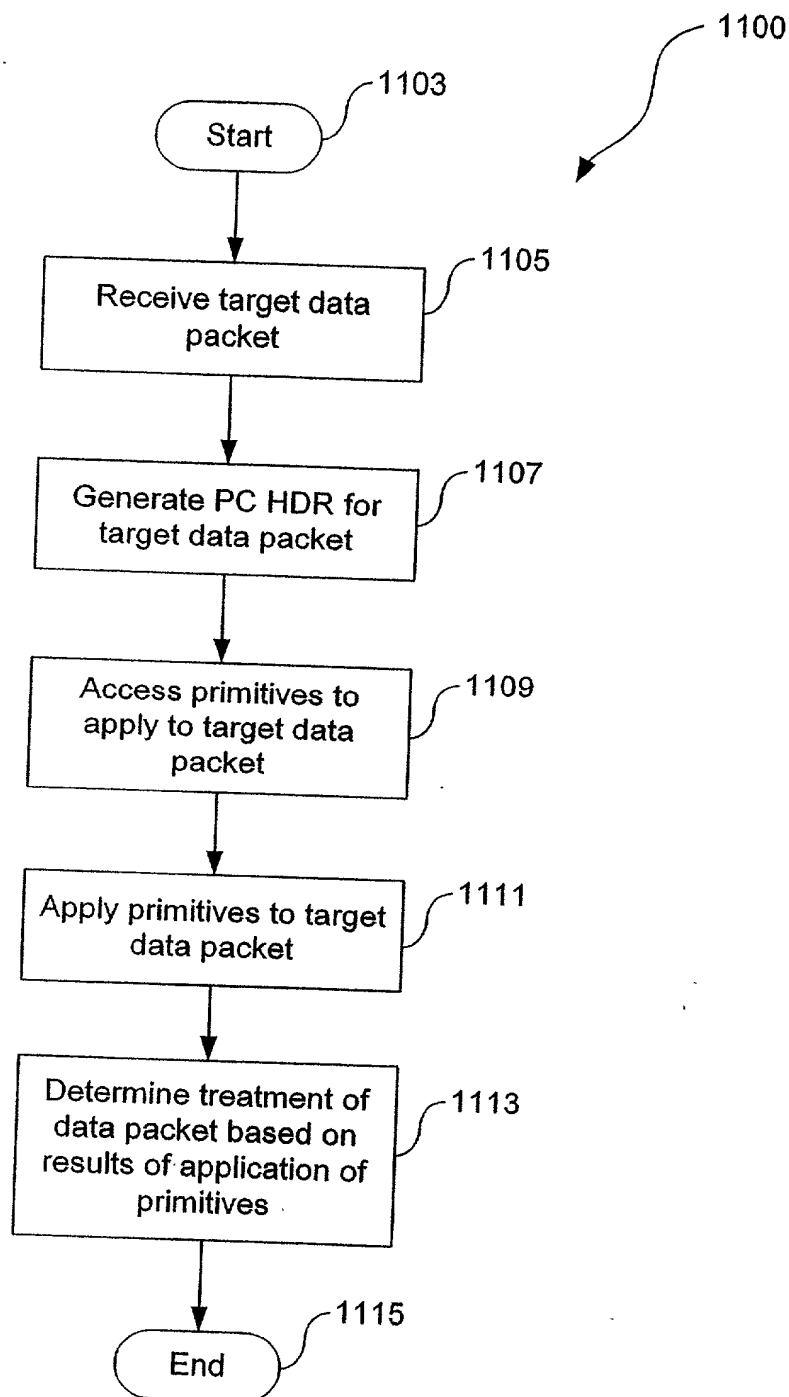


FIG. 11
Test Application

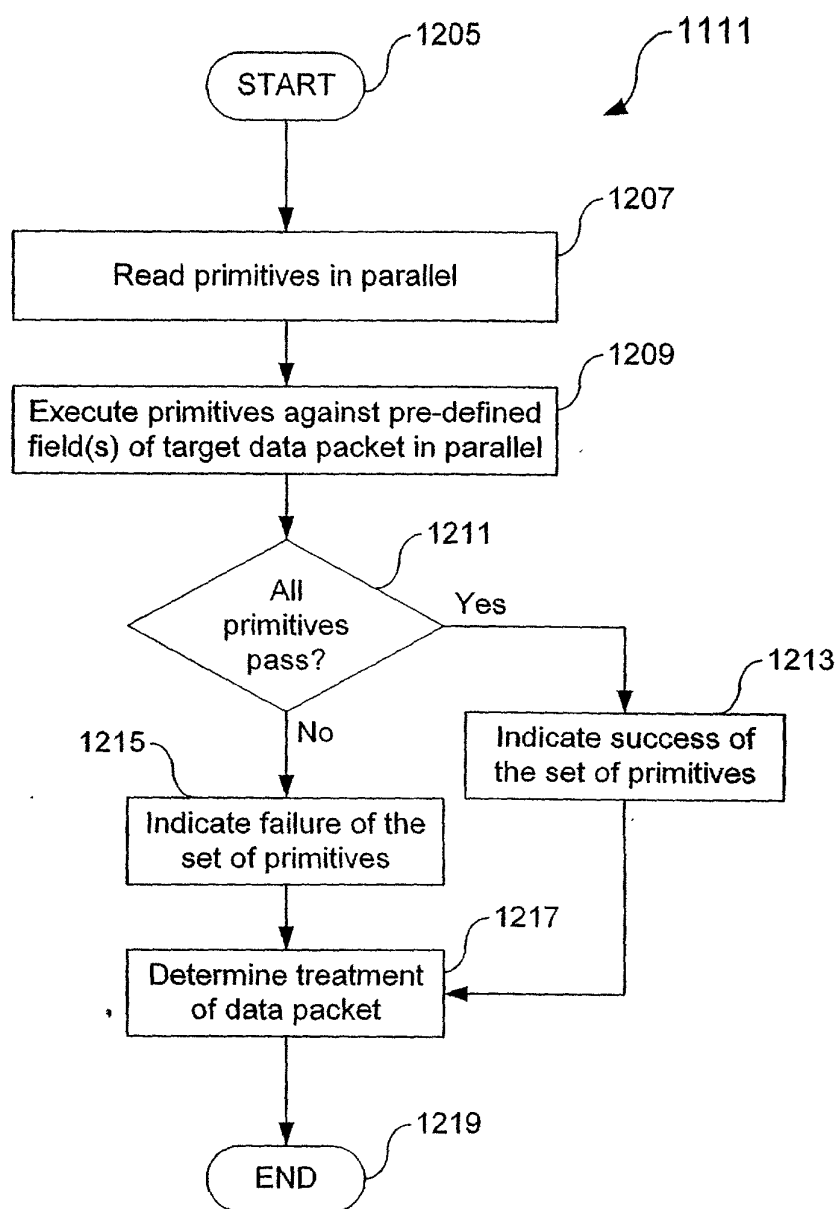


FIG. 12

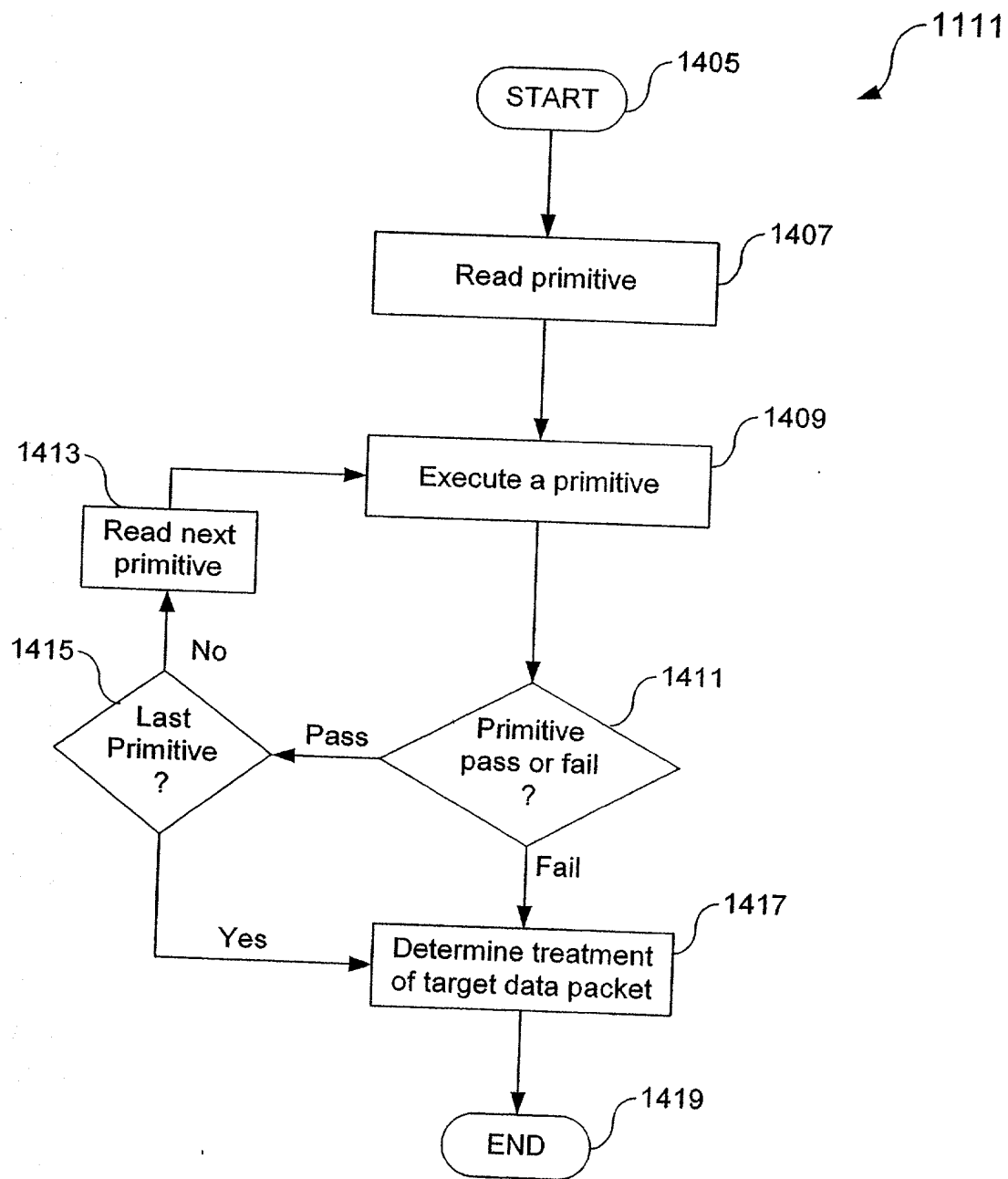


FIG. 14

1501

| Byte | | | | | | | | | | | | | | | |
|------|--------|----------|---|------------------|---|---|---|-----------------------|---|----|----|------------------------|----|----|----|
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| OP | OFFSET | reserved | | Operand 1 (mask) | | | | Operand 2 (low bound) | | | | Operand 3 (high bound) | | | |

1525 1540

1545

1550

1555

1560

Fig. 15A

| Byte | | | | | | | | | | | | | | | |
|------|--------|----------|---|------------------|---|---|---|---------------------------|---|----|----|----|----|----|----|
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| OP | OFFSET | reserved | | Operand 1 (mask) | | | | Operand 2 (compare value) | | | | | | | |

1565 1575

1580

1585

1525/1565

Fig. 15B

1590

| Bit Position | | | | | | | |
|--------------|---|---|---|----------|---|---|------|
| 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
| OP_CODE | | | | BASE_REG | | | SIZE |

1526

1530

1535

Fig. 15C

| | | | | | | | |
|------|---------|----------|------|--------|----------|------------------|------------------|
| | 1526 | 1530 | 1535 | 1575 | 1580 | 1585 | 1590 |
| | OP_CODE | BASE_REG | SIZE | OFFSET | Reserved | Operand 1 | Operand 2 |
| 1600 | 1 | DIX_BASE | A | 0 | | 0 x ffffffff0000 | 0 x 010203040000 |
| 1605 | 2 | DIX_BASE | A | 6 | | 0 x ffffffff0000 | 0 x 090a0b0c0000 |
| 1610 | 3 | IP_BASE | L | 12 | | 0 x ffff0000 | 0 x 78020000 |
| 1615 | 4 | IP_BASE | L | 16 | | 0 x ffff0000 | 0 x 78020000 |
| 1620 | 5 | IP_BASE | B | 1 | | 0 x e 0 | 0 x 00 |

FIG. 16A

